

### Poll #3



Consider the following local lamp maker who sells lamps locally to folks in the town at a competitive market price of  $P=\$30$ .

How many Lamps should the Lamp maker make?

Output	Total Revenue	Total Costs	Marginal Revenue	Marginal Costs	Average Revenue	Average Cost	Profit
0		\$15					
1		\$16					
2		\$20					
3		\$29					
4		\$45					
5		\$70					
6		\$106					

1. What is the optimal number of lamps the lamp maker should producer?
  - a) 3
  - b) 4
  - c) 5
  - d) 6
  
2. What is slope of the lamp maker's total revenue and is it increasing, decreasing or constant?
  - a) 15, increasing
  - b) 4, decreasing
  - c) 30, constant
  - d) 30, increasing
  
3. At what quantity and price at which the Average Total Cost (ATC) curve is at it's minimum?
  - a)  $Q=3, P=\$9.67$
  - b)  $Q=4, P=\$11.25$
  - c)  $Q=5, P=\$14$
  - d)  $Q=6, P=\$17.67$
  
4. What is the profit of the lamp maker at the optimal quantity of lamps?
  - a) \$80
  - b) \$75
  - c) \$61
  - d) \$40
  
5. Make another column on your table and subtract the marginal revenue (MR) and the marginal cost (MC) for each unit of production up to the optimal quantity  $Q^*$  of the lamp maker. What does it sum up to?
  - a) \$95
  - b) \$75
  - c) \$61
  - d) \$80